

**MINUTES
of the
SECOND MEETING
of the
RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE**

**July 19, 2012
Room 321, State Capitol**

The second meeting of the Radioactive and Hazardous Materials Committee was called to order by Representative Antonio Lujan, chair, on Thursday, July 19, 2012, in Room 321 at the State Capitol.

Present

Rep. Antonio Lujan, Chair
Sen. Richard C. Martinez, Vice Chair
Rep. Cathrynn N. Brown
Sen. Carroll H. Leavell
Rep. Jim R. Trujillo

Absent

Rep. Thomas A. Anderson
Sen. Vernon D. Asbill
Rep. Brian F. Egolf, Jr.
Sen. Stephen H. Fischmann
Sen. John Pinto
Rep. Shirley A. Tyler
Sen. David Ulibarri

Advisory Members

Rep. Eliseo Lee Alcon
Sen. William F. Burt
Rep. Jim W. Hall
Sen. Nancy Rodriguez
Rep. Nick L. Salazar

Sen. Rod Adair
Rep. Donald E. Bratton
Sen. Eric G. Griego
Sen. Gay G. Kernan
Sen. Lynda M. Lovejoy
Sen. William H. Payne
Sen. Bernadette M. Sanchez

Staff

Gordon Meeks
Renée Gregorio

Guests and Handouts

The guest list is in the meeting file, as are copies of all handouts and written testimony.

Thursday, July 19

Northern New Mexico Citizens Advisory Board

Ralph Phelps, chair, Northern New Mexico Citizens Advisory Board (NNMCAB), and Doug Sayer, chair of the Environmental Action Subcommittee, addressed the committee on the NNMCAB responsibilities, mission, contributions and recommendations. The board is a site-

specific advisory board (SSAB) under the U.S. Department of Energy (DOE) that was formed to increase the direct involvement of local citizens in the DOE's environmental management (EM) remediation decisions at nuclear facilities in the U.S. Mr. Phelps said that the NNM CAB is one of eight SSABs, and each CAB is associated with one of the laboratories across the country. These boards support the DOE in environmental restoration programs, future land-use issues, stewardship of lands and risk and budget issues, he added. The NNM CAB provides two-way communication as it interacts with citizens, the DOE, Los Alamos National Laboratory (LANL), federal agencies, associated advisory boards, Indian nations, tribes and pueblos, New Mexico's Department of Environment (NMED), local communities and civic organizations, Mr. Phelps indicated. He said that the NNM CAB is composed of 20 members who serve two-year terms and have a mix of backgrounds and experiences.

Among the NNM CAB's recommendations that Mr. Phelps spoke of are:

- well installations — members provided feedback, and LANL switched over to using alternate drilling methods that made monitoring sampling stronger and more reliable;
- accelerating removal of transuranic (TRU) waste from Area G to the Waste Isolation Pilot Plant (WIPP) site — the NNM CAB recommended removal of above-ground waste so underground waste could be remediated and, because of fire threat, LANL forged an agreement with the NMED to reschedule some of LANL's milestones on the consent order to accomplish this;
- using rail for moving waste — the NNM CAB provided information to LANL about rail transport, noting that shipment by rail eased truck traffic on highways and recommended the use of rail so long as the DOE consults with the affected local communities; and
- the budget — the NNM CAB supports baseline funding to ensure that LANL has the resources to stay on schedule with TRU waste disposal and compliance with the consent order.

Committee member questions and ensuing discussion included the following:

- clarification that it is low-level waste being shipped by rail;
- concern over the quality of water from the Buckman Diversion Project and assurance that LANL has a solid monitoring program for these wells, a good storm water program and protections in place for the Buckman Diversion Project;
- Santa Fe is not totally dependent on the Buckman Diversion Project for its water source, as the city also has wells, and there is mountain runoff on the east side;

- organizations that monitor the water for Santa Fe include the city and county, LANL, the U.S. Geological Survey, the Buckman Direct Diversion Project Board, the Army Corps of Engineers, the Bureau of Reclamation and federal and state fish and wildlife departments;
- cleanup priority is at Tech Area 54, where there is above-ground TRU;
- 3,706 cubic meters of waste have to be moved to WIPP, and this year, 150 shipments have been moved as of the end of June, with a target for 2012 set at 180;
- no accidents have been reported from the transportation of hazardous waste shipments by truck, and there have been 200 truck shipments this year;
- a suggestion that a regulatory compliance officer from the Buckman Diversion Project testify for the committee on its sampling and monitoring program;
- the difference between low-level and TRU waste is that the former requires deep burial in salt mines, but low-level waste is easier to dispose of as it is contamination from products used in working with radioactive materials, such as protective clothing;
- the number of barrels in a shipment depends on the activity of the material being transported, and the total radioactivity in a shipment must be acceptable for transportation to WIPP; and
- the budget of \$219 million was an approved budget from the federal government for EM work and did not involve money from city, county or state budgets.

Regional Coalition of LANL Communities

Sharon Stover, councilor for the Regional Coalition of LANL Communities, addressed the committee on the coalition's business until Santa Fe Mayor David Coss arrived. She said that the mediation of legacy waste at LANL is important to the coalition. She added that the coalition is interested in seeing that local governments speak with one voice to impact the removal of waste to keep communities safe throughout the region. She stressed the need for cleanup of legacy waste.

She stated that the coalition meets once a month and that much of the coalition's work impacts jobs in the region. She added that coalition members just returned from a trip to Washington, D.C., to speak with the New Mexico congressional delegation about the impact on jobs in the state from not cleaning up the waste.

Mayor Coss arrived and spoke of the coalition's need to be informed about issues at LANL, which affect both the city and county, and include the Buckman Diversion Project and the economic and environmental impacts of LANL. He stressed the need to interact with LANL,

the DOE and local communities and said that he has been attending coalition meetings for two years and became chair of the coalition last week.

Committee member questions and ensuing discussion included the following:

- the need for the coalition to engage with the legislature and the state over issues such as the state's regulation of cleanup of legacy contaminants at LANL and the state's pivotal role in how communities relate to LANL;
- the importance of a continued relationship with the congressional delegation and having a unified showing for continued federal support, especially in relationship to lost jobs and the economic impact to the state;
- the coalition's role in keeping LANL's budget from decreasing even further;
- there is currently no agreement among communities on the Chemistry and Metallurgy Research Replacement Nuclear Facility (CMRR) Project, although the coalition is working toward being better informed about this facility, as CMRR could generate 1,000 jobs;
- the coalition needs to study the scientific, technical and engineering aspects of the CMRR and what its mission is;
- concern for the removal of both above-ground and underground waste to ensure a safe water supply; and
- although the DOE is funding the regional coalition, there is no assurance of continued funding from the federal government, and the local governments provide a funding source on a per capita basis.

Budgeting for EM at LANL

Pete Maggiore, National Nuclear Security Agency (NNSA), expressed the regrets of his colleague, Kevin Smith, who could not attend the committee hearing. He began by comparing the area of LANL to that of Washington, D.C., emphasizing the challenges that LANL's 268 miles of roads provide. He said that LANL's unique facilities, including nuclear, supercomputing, nanotechnology and dual axis radiographic hydrodynamic test facilities, draw the attention of researchers both nationally and internationally. He discussed LANL's energy security pillars, which include the impacts of energy demand growth, sustainable nuclear energy and clean energy initiatives. Mr. Maggiore reviewed the NNSA's organizational chart and spoke of the NNSA's formation having roots with people from New Mexico, including Senator Pete Domenici and Governor Bill Richardson, who was then the DOE secretary. He indicated that although the NNSA's organizational structure is complex, he believes that the restructuring has created a stronger structure. He added that the NNSA was created by Congress as a separate unit

of the DOE, was established in 2000 and oversees the operations of the U.S. nuclear weapons enterprise.

Mr. Maggiore reviewed the EM mission and the scope of the NNSA, which is to complete the safe cleanup of the environmental legacy brought about from five decades of nuclear weapons development and production and government-sponsored nuclear energy research. He admitted this is a massive job, with a budget of \$5 billion to \$6 billion a year. He said that the jobs are more complicated, take longer and cost more money than when the EM office was initially formed, mainly due to increasingly complicated technical and regulatory environmental challenges.

In reviewing photographs in the handout, Mr. Maggiore described several activities that take place at LANL in disposing waste and in remediating soil and ground water. He added that EM has been active year this year in "designing and constructing infrastructure to move waste off the hill quickly".

In citing progress to date, Mr. Maggiore said that approximately half of the 2,100 sites slated for cleanup are completed; that of the 26 material disposal areas to be cleaned up, 10 have been completed, with others in investigation phases; that a ground water monitoring network is in place; that substantial monitoring and sediment controls are installed; and that new records are set each year for TRU waste shipments.

He indicated that remediation projects funded by the federal American Recovery and Reinvestment Act of 2009 (ARRA) have all been completed and include decontamination and demolition of buildings, cleanup of land and installation of ground water monitoring wells. Also, the excavation of material disposal in Area B was completed with ARRA funding, he said.

Mr. Maggiore spoke about progress made in 2012 thus far, including a public presentation of the framework agreement, development and progress to date of the 3,706 cubic meters of TRU waste that need to be moved to WIPP, water protection and the ways in which the public is being informed.

He explained that the budget for the office of EM is worked on over the course of three fiscal years (FYs) simultaneously; for example, the FY 2012 budget would include budget implementation for the current FY, budget formulation with Congress for FY 2013 and budget planning with the DOE for FY 2014. He estimated the funding for LANL in FY 2012 to be \$2.25 billion, of which EM is about 8% of the pie at \$187 million. He added that in previous years, the EM office received \$212 million from ARRA, which has now been reduced to half that amount in this FY. He indicated that future funding is all subject to congressional appropriation and the challenge is not knowing what the appropriation will be and making decisions and plans anyway. The highest-risk-level work will be done first, he added, in such uncertainty.

Mr. Maggiore concluded his testimony with a look toward the future by stating that the

foundational element of the NNSA's work will be a comprehensive EM database that will reside "in the cloud", or on the internet, and will be available to LANL managers and the public. This will enable the sharing of historical activities and impacts in a much more transparent manner. He spoke about the 50-year environmental stewardship plan's integrated vision for LANL and for the community.

Committee member questions and ensuing discussion included the following:

- regarding legacy cleanup, New Mexico got off to a later start than other states, and cleanup efforts have not been funded as much as other sites, but cleanup is happening and the laboratories have a lot of credibility riding on completing the legacy cleanup in a timely manner;
- newly generated waste needs to get to WIPP in a more timely and more efficient fashion;
- New Mexico receives one-third of the total NNSA budget for states;
- concern over funding for cleanup at LANL because it is less than other DOE sites;
- can New Mexico do anything to prompt the DOE to assist on focusing on safe and secure operations at LANL?
- New Mexico's success for a robust budget has to originate in Congress;
- in the past, appropriations have not come the state's way because of a lack of planning, but the state now has a demonstrated strategy, performance and plan;
- in terms of waste removal and handling, LANL is breaking records in moving cubic meters of waste out of Los Alamos;
- ARRA money of approximately \$360 million was spent in FY 2011;
- LANL has reprioritized sites to be cleaned up to get the highest-risk material dealt with first;
- there is a strong, long-term commitment to cleanup of LANL, so it is unlikely that LANL will become a site such as Rocky Flats;
- the state's supercomputing use by LANL; and

- investigation (as compared to cleanup) includes compiling historical data from a location, collecting soil and water samples and putting information into a report for the DOE.

LANL Energy Programs Overview

John Sarrao, program director at the Office of Science Programs at LANL, began by giving committee members an overview of his background. He spoke of energy's broad domain and that LANL focuses on three main areas: the impacts of energy demand growth, sustainable nuclear energy and clean energy. He talked about LANL and the DOE's view of working across a continuum, from the challenges of energy research, to discovery science, to applied research and to the technology itself. Mr. Sarrao indicated that LANL forms partnerships with several organizations that focus on fundamental materials science, reactor simulations and advanced computing in order to succeed.

He added that hundreds of scientists arrive at LANL each year to complete research in its facilities. He mentioned the success of the New Mexico Consortium Biology Laboratory, a collaboration that includes LANL, the University of New Mexico, the New Mexico Institute of Mining and Technology and New Mexico State University, and is a facility for biofuels research led by scientist Richard Sayre. Mr. Sarrao also spoke of LANL's involvement in promoting the development of the small modular reactor (SMR) industry, with projects in research and development related to coolants for SMR applications as well as the development of site screening and tools for SMRs. He added that LANL is not advocating this industry, but it is providing the underlying science to address questions related to its development.

Committee member questions and ensuing discussion included the following:

- intellectual property issues related to fundamental research at the Office of Science Programs is straightforward, with a robust patent portfolio; applied science is more challenging, but the patent office is engaged in protecting its intellectual property rights;
- in terms of funding, of the \$2 billion overall budget, \$1 billion goes to the Office of Science Programs, with \$100 million in the applied energy portfolio;
- it is difficult to predict growth: in the short-term view, there are budgetary challenges, and in the long-term view, energy problems must be solved, so having a broad strategy is crucial;
- the New Mexico consortium is a collaborative effort that can handle larger-scale biofuel activity;
- seismic sources of hazardous materials releases will be provided by Mr. Sarrao;

- research on small electric power units that could serve small communities is being done by several companies, but LANL is looking at questions of waste storage;
- storage is really the issue when providing energy to smaller communities, whether it is photovoltaic or nuclear, and many companies are exploring this issue, but not LANL, which engages only in the underlying scientific analysis of such energy;
- LANL provides the science for modular reactors, which involves the challenges of waste cycles and placement of reactors;
- definition of "smart grid", which can actually track how much energy is being used and when, since the way energy goes into the grid varies depending on weather and environment; and
- in dealing with storage and transmission of alternative sources of energy, it is optimal to build in stability and "smartness" as the energy is being developed and revitalized.

Public Comment

Representative Lujan asked that all public comment be limited to five minutes. The first speaker, Michael Loya, said he has an environmental water background and has been a water advocate for some time, as his family members are farmers and ranchers from southern New Mexico. He described drilling methods to keep sampling cleaner, which was one of the last efforts of Senator Domenici and is known as casing-advanced drilling. He stressed that he spoke on behalf of the CMRR and believes that LANL has been a font of knowledge and cutting-edge technology. He advocated for the DOE's EM work and the work of LANL and stated that there is no plutonium coming down from the plateau and into the Buckman Diversion Project.

Joni Arends, executive director of Concerned Citizens for Nuclear Safety (CCNS), expressed her concern about the morning presentations and said that she would be submitting written comments. She stated that her organization is perturbed about the effects of the fires on the canyons in Los Alamos and, in turn, the subsequent effect on the water in the Buckman Diversion Project. She said that high priority sites can release contamination and that there is nothing to hold the water when there are serious flows, such as the ones in the Pueblo of Santa Clara of over 2,000 cubic feet per second. She added that the EPA's documentation of PCB contamination also causes CCNS members to feel apprehensive. She said that PCB levels are at much higher rates than the state can handle. She stated that storm events can and have carried contamination into the Buckman Diversion Project, despite the "turnoffs" for the system that do exist.

Adjournment

There being no further business, the committee adjourned at 1:10 p.m.